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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO. |
|--|-------------|----------------------|------------------------------|------------------|
| 09/966,180   | 09/28/2001  | Peter A. Hansen      | 1662-39300 JMH<br>(P01-3697) | 5524             |
| 22879  | 7590        | 08/09/2005           | EXAMINER                     |                  |
| HEWLETT PACKARD COMPANY<br>P O BOX 272400, 3404 E. HARMONY ROAD<br>INTELLECTUAL PROPERTY ADMINISTRATION<br>FORT COLLINS, CO 80527-2400 |             |                      | ELAMIN, ABDELMONIEM I        |                  |
|  |             |                      | ART UNIT                     | PAPER NUMBER     |
|  |             |                      | 2116                         |                  |

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/966,180

Applicant(s)

HANSEN ET AL.

Examiner

A Elamin

Art Unit

2116

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 and 38-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-33, 38-47 and 50-66 is/are rejected.
- 7) ☒ Claim(s) 34, 35, 48 and 49 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-18, 24-33, 38-47, 50-54, 59-66 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen et al, PGB Pub. No. US 2003/0005339.

3. Claims 1, 50-51, 59-66 Cohen teaches a method of allocating power in a rack mounted server system [*rack 18 of Fig. 1*] housing a server [*para 0006, lines 5-6*], the server coupled to a central power supply [*power supply 12 of Fig. 1*], the method comprising:

requesting permission by the server to allocate power from the central power supply [*Step S3 of Fig. 2*];

analyzing power requirements of the server requesting allocation against a capability of the central power supply [*Steps S4 and S5 of Fig. 2*]; and

powering the server if power is available from the central power supply [*abstract, Fig. 2*].

4. Claim 2, Cohen teaches analyzing power requirements of the server requesting allocation against the capability of the central power supply further comprises determining if the central power supply has available power to supply the server and still meet an operating condition [*Steps S3-S6 of Fig. 2 and related disclosure*].

5. Claims 3, Cohen teaches the operating condition is having a fully redundant capability from the central power supply [*abstract*].

6. Claims 4, Cohen teaches the operating condition is having sufficient available power to operate the server [*Steps S5 and S6 of Fig. 2*].

7. Claims 5, Cohen teaches requesting permission further comprises: sending a request by the server to the central power supply across a primary communication pathway; and responding by the central power supply across the communication pathway [*Fig. 1*].

8. Claims 6 and 7, Cohen teaches sending the request and responding across a communication pathway farther comprises sending the request and responding across a serial communication pathway [*inherent in computers rack*].

9. Claims 8, Cohen teaches requesting permission further comprises: sending the request by the server across a first communication pathway to a chassis communication module; relaying the request by the chassis communication module to a power supply communication module across the primary communication pathway; polling individual power supplies in the central power supply to determine available power capacity; responding by the power supply communication module with a response being one of permission granted and permission denied to allocate power [*Figs. 1 and 2 and related disclosure*].

10. Claim 9, Cohen teaches installing the server into a chassis mounted in the rack mounted server system [*para 0002, lines 3-4, Step S3 of Fig. 2*]; powering a communication device in the server which performs the requesting step [*inherent*]; refraining from powering remaining portions of the server until permission is received by the communication device [*Steps S6 and S7 of Fig. 2*].

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11. Claims 10, 24, 27, 38, 41-43, 52, Cohen teaches a power management system for allocating power in a rack mounted server system having a server mounted therein [*abstract*], the rack mounted server system also having a power supply system apart from the server [*power supply 12 of Fig. 1*], the server coupled to the power supply system, the power management system comprising: a chassis communication module [*16 of Fig. 1*]; a power supply communication module [*14 of Fig. 1*]; a first communication pathway coupling the chassis communication module and the power supply communication module [*connection between elements 16 and 14 of Fig. 1*]; a second communication pathway coupling the server to the chassis communication module [*Fig. 1*]; a third communication pathway coupling the power supply system to the power supply communication module [*the pathway coupling power supply 12 to computers 10a-10n of Fig. 1*]; wherein the server is adapted send a request for permission to allocate power from the power supply system across the second communication pathway to the chassis communication module [*step S3 of Fig. 2*]; wherein the chassis communication module is adapted to relay the request for permission to the power supply communication module across the first communication pathway [*Fig. 1, para 0007*]; and wherein the power supply communication module is adapted to poll the power supply system across the third communication pathway [*Step S5 of Fig. 2*], receive results of that polling across the third communication pathway, and send a response to the server across the first communication pathway, the response being one of permission granted or permission denied [*abstract, Figs. 1 and 2*].

12. Claim 11-12, 28-29, Cohen teaches a random access memory array (RAM); a read only memory (ROM); a microcontroller controller coupled to the RAM and ROM, the microcontroller

adapted to execute programs stored on the ROM [*inherently power controllers include a random access memory array (RAM); a read only memory (ROM); a microcontroller controller coupled to the RAM and ROM, the microcontroller adapted to execute programs stored on the ROM*].

13. Claim 13-18, 25-26, 30-33, 39-40, 44-47, 53-54 are inherent in computers rack.

***Claim Rejections - 35 USC § 103***

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 19-23, 55-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen et al, PGB Pub. No. US 2003/0005339 in view of Nakagawa PGB Pub. No. US 20030037150.

16. Claims 19, 21-23, 55-58 Cohen teaches In a rack mounted server system having a plurality of computers [*Fig. 1*] powered by a central power supply system [*12 of Fig. 1*], a method of de-allocating power comprising: monitoring a power demand of the plurality of computers [*S4 of Fig. 2*]; requesting anew added computer to shut down if the power demand of the plurality of computers exceeds a threshold power demand [*Step S8 of Fig. 2*]; repeating the monitoring step and requesting step until the power demand is equal to or less than the threshold power demand [*Fig. 2*].

Cohen fails to teach requesting a non-critical computer of the plurality of computers to shut down if the power demand of the plurality of computers exceeds a threshold power demand.

Nakagawa teaches a system for quality of service based server cluster power management [*title, abstract*], comprising requesting a non-critical computer of the plurality of computers to shut down if the power demand of the plurality of computers exceeds a threshold power demand [*abstract, para 0009*].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teaching of Cohen to include requesting a non-critical computer of the plurality of computers to shut down if the power demand of the plurality of computers exceeds a threshold power demand, because, in response to power interruption, instead of terminating all the processes supported by the servers in the rack, diverting power from servers hosting low-priority activity to servers hosting high-priority sets.

17. Claim 20, Cohen teaches monitoring the power demand further comprises polling individual power supplies in the central power supply system to determine a total power output of the power supply system [*para 0007*].

***Allowable Subject Matter***

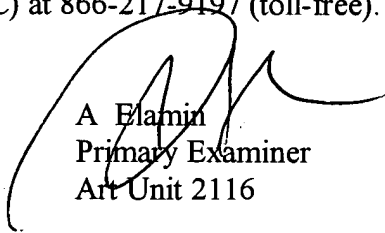
18. Claims 34-35 and 48-49 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A Elamin whose telephone number is (571) 272-3674. The examiner can normally be reached on MON-FRI 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



A Elamin  
Primary Examiner  
Art Unit 2116

August 4, 2005

**A. ELAMIN**  
**PRIMARY EXAMINER**